

Massachusetts electric ratepayers are being asked to pay for new pipeline—something never before proposed.

**THE STUDY ASKS:**

**ARE NEW GAS PIPELINES NEEDED TO KEEP THE LIGHTS ON IN NEW ENGLAND?**

**THE ANSWER:**

No. Under business-as-usual circumstances, the region **can maintain electric reliability through 2030**, even without additional new natural gas pipelines. Even under a “stressed system” scenario, there are cheaper, less carbon intensive ways to ensure electric reliability, like energy efficiency and demand response, that are less risky for ratepayers.

**the findings**

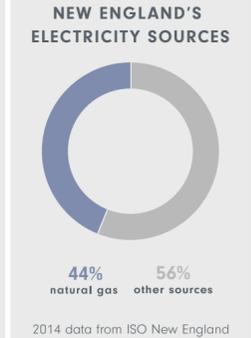
Using very conservative assumptions, the Study finds that the reliability of the electric system can and will be maintained over time.

 Thanks to energy efficiency, **our electric needs on the winter’s coldest days aren’t growing over time anymore**, despite economic growth.

 New energy market rules will ensure that new gas-fired power plants have oil backup systems so that they can run without natural gas.

This status quo will not necessarily lower electric bills or meet New England’s long-term goals to reduce carbon pollution.

**FOR CONTEXT**



**the choices**

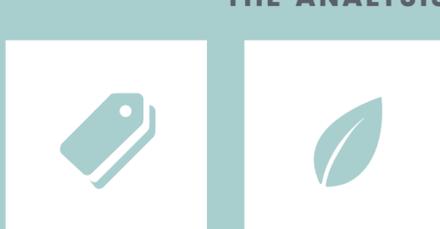
 The Study also looks at our choices to meet our future energy needs if New England becomes even more reliant on natural gas fired power, and experiences a short-term disruption in other fuels—causing the electric system to be more stressed than expected on very cold days.

**THE STRESSED SCENARIO**



In the stressed scenario, the system would need up to about 2,400 megawatts more power on several days per year by 2030, the equivalent of an additional 0.42 billion cubic feet per day of new gas capacity in the coldest weather.

**THE ANALYSIS**



The Study modeled the ratepayer costs and carbon impacts per year of different solutions that could meet the reliability needs when the system is stressed.

The most cost effective reliability solution to meet future energy needs when the system is stressed is **new investment in energy efficiency and demand response**. None of the reliability solutions analyzed will achieve New England’s climate goals by 2030.

**Energy Efficiency / Demand Response**

	Additional investment in EE & DR programs that allows customers to use less energy, and that incentivizes energy users to reduce consumption when demand for power is highest.	<b>\$146</b> million net savings	<b>1.86</b> million tons of CO <sub>2</sub>
	 <b>Greatest savings</b>		

**Natural Gas Pipeline**

	New gas pipeline infrastructure sized and timed to maintain electric reliability.	<b>\$61</b> million net savings	<b>80K</b> tons of CO <sub>2</sub>
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**Energy Efficiency / Low Carbon Imports**

	Additional energy efficiency and guaranteed imports (likely hydropower) using existing power lines.	<b>\$98</b> million net savings	<b>4.86</b> million tons of CO <sub>2</sub>
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**Energy Efficiency / Low Carbon Imports with New Power Lines**

	Additional energy efficiency and guaranteed imports (likely hydropower) using new power lines.	<b>\$102</b> million net spent	<b>4.86</b> million tons of CO <sub>2</sub>
	 <b>Highest up-front cost</b>		

**Liquefied Natural Gas**

	Guaranteed supplies of liquefied natural gas for power plants.	<b>\$27</b> million net savings	<b>30K</b> tons of CO <sub>2</sub>
	 <b>Lowest up-front cost</b>		

**Even if pipeline infrastructure is overbuilt in an effort to reduce electric prices, it will not provide ratepayers the savings they would achieve with new investments in energy efficiency and demand response.**

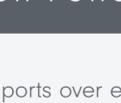
**Oversized Natural Gas Pipeline**

	New 0.5 Bcf/day natural gas pipeline in service in 2020 and sized larger than the stressed system reliability need.	<b>\$133</b> million net savings	<b>200K</b> tons of CO <sub>2</sub>
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**Low Carbon Imports with New Power Lines**

	Guaranteed 2400 MW of imports over existing and new power lines in service in 2020, earlier than the stressed system reliability need.	<b>\$284</b> million net spent	<b>6.65</b> million tons of CO <sub>2</sub>
	 <b>Will meet New England's climate goals through 2030</b>		

**the study**

		
The Study was performed for the Massachusetts Attorney General’s Office by the Boston-based international consulting firm, Analysis Group, Inc.	It was informed by feedback from a Study Advisory Group comprised of representatives from electric utilities, the gas industry, the business community, consumer groups, and clean energy and environmental groups.	Unlike many prior studies, the Study is independent, takes into account recent events like the anticipated retirement of the Pilgrim Nuclear facility, covers all of New England and focuses on meeting reliability needs.

For more **Information:** visit [mass.gov/ago](http://mass.gov/ago)

